



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,115	10/02/2003	Lien-Jin Chiang	CHIA3057/EM	6034
23364	7590	03/16/2006	EXAMINER	
BACON & THOMAS, PLLC			BUI, HUNG S	
625 SLATERS LANE			ART UNIT	PAPER NUMBER
FOURTH FLOOR			2841	
ALEXANDRIA, VA 22314				

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/676,115	CHIANG ET AL.	
	Examiner Hung S. Bui	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 January 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 9-20 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-6 and 8 is/are rejected.
- 7) Claim(s) 2 and 3 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 January 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claim 8 is withdrawn in view of the newly discovered reference(s) to Wagner [US 6,459,578]. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Wagner [US 6,459,578] in view of Mayer [US 4,399,484].

Regarding claim 1, Wagner disclose an electronic apparatus (10, figure 2) with natural convection structure, comprising: a main body (12) to be placed on a surface, the main body having an airflow channel piercing through the main body from a top surface to a bottom surface thereof (a channel from an intake 20 to bottom 18, figure 2); wherein the airflow channel is formed by an inner wall extending from the top surface to the bottom surface of the main body (figure 2).

Wagner discloses the instant claimed invention except for the electronic apparatus including a support device disposed on the bottom surface of the body.

Mayer discloses an electronic device (figure 1) having at least one supporting device (18) disposed on the bottom surface of a main body.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a support device to the main body of Wagner, as suggested by Mayer, in order to provide a rigidity of the main body or to mount the electronic device with any surface.

Regarding claim 4, Wagner in view of Mayer disclose the instant claimed invention except for the specific height of the support device.

The examiner takes a notice that the specific height of the support device is depended on the specific size of the electronic apparatus.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the specific height of the support device to be provided for the electronic apparatus, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 6, Wagner discloses the distances from the airflow channel to the edges of the main body are substantially equal (figure 2).

Regarding claim 8, Wagner further discloses the main body and the airflow channel being integrally formed (figure 2).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner, as modified, as applied to claim 1 above, and further in view of Chuang [US 2004/0095713].

Regarding claim 5, Mayer, as modified, discloses the instant claimed invention except for the electronic apparatus being formed of a power supply.

Chuang discloses an electronic apparatus (3, figure 3) having a plurality of ventilation holes (34) mounted thereon and being formed of a power supply.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the electronic apparatus of Wagner, as modified, for a power supply, as suggested by Chuang, for the purpose of dissipating heat.

Allowable Subject Matter

5. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The cited references fail to teach or suggest an electronic device having a printed circuit board including an opening, an airflow channel connecting from the top surface to the bottom surface of the electronic device, wherein the centroids of the opening of the printed circuit board and the airflow channel are positioned at the same axis vertical between the top and the bottom of the electronic device.

Response to Arguments

7. Applicant's arguments with respect to claims 1-6 and 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

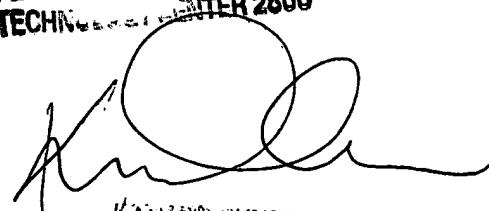
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

03/14/06
Hung Bui
Art Unit 2841

KAMAND CUNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800



KAMAND CUNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800